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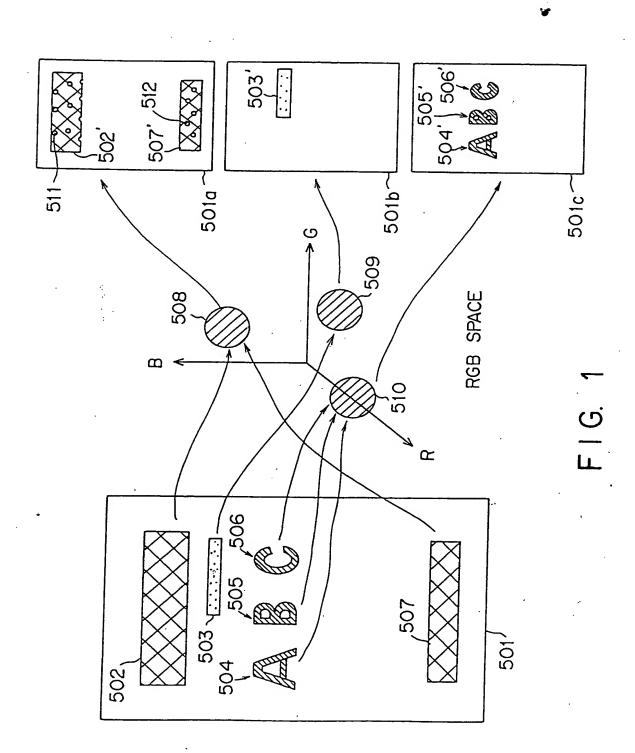
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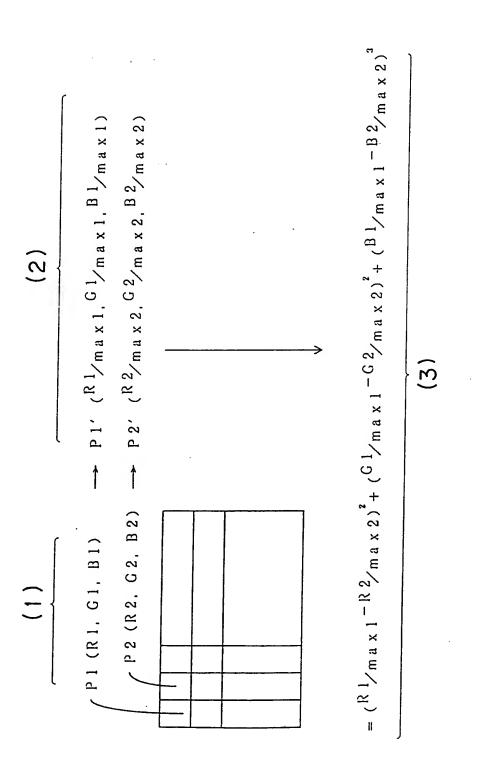
Yutaka KATSUYAMA Unassigned 826.1526D

APPARATUS INVENTORS: SERIAL NO.: DOCKET NO.:



TITLE: COLOR IMAGE PROCESSING APPARATUS AND PATTERN EXTRACTING APPARATUS Yutaka KATSUYAMA Unassigned 826.1526D

INVENTORS: SERIAL NO.: DOCKET NO.:



APPARATUS INVENTORS:

Yutaka KATSUYAMA

SERIAL NO.: DOCKET NO.:

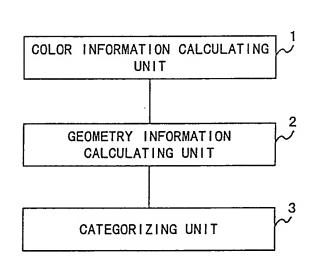


FIG. 3

TITLE: COLOR IMAGE PROCESSING
APPARATUS AND PATTERN EXTRACTING
APPARATUS
INVENTORS: Yutaka KATSUYAMA

Yutaka KATSUYAMA Unassigned 826.1526D

SERIAL NO.: DOCKET NO.:



CLUSTERING UNIT 12 GROUPING UNIT

FIG. 4

Yutaka KATSUYAMA

INVENTORS: SERIAL NO.: DOCKET NO.:

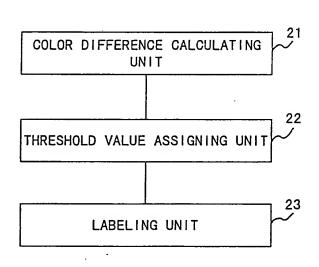


FIG. 5

INVENTORS:

Yutaka KATSUYAMA

SERIAL NO.: DOCKET NO.:

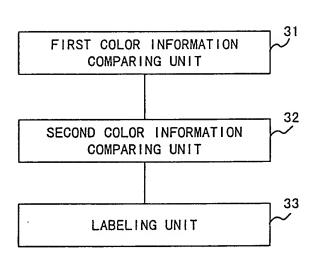
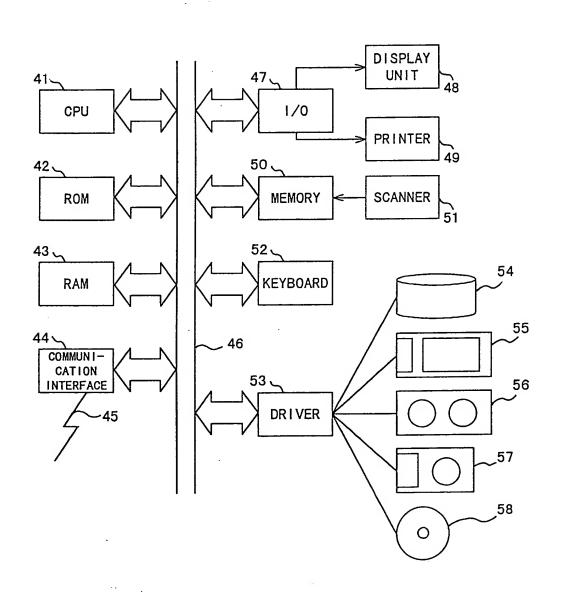


FIG. 6

TITLE: COLOR IMAGE PROCESSING APPARATUS AND PATTERN EXTRACTING APPARATUS INVENTORS: Yutaka KATSUYAMA

Yutaka KATSUYAMA Unassigned 826.1526D

SERIAL NO .: DOCKET NO .:



F I G. 7

Yutaka KATSUYAMA

APPARATUS
APPARATUS
INVENTORS:
SERIAL NO.:
DOCKET NO.:

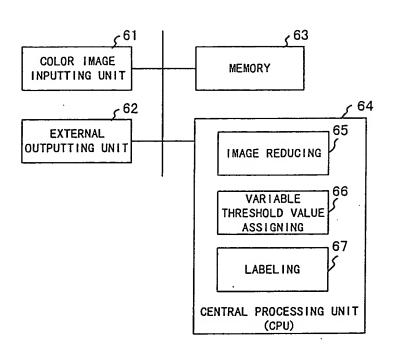


FIG.

APPARATUS INVENTORS:

Yutaka KATSUYAMA

SERIAL NO.: DOCKET NO.:

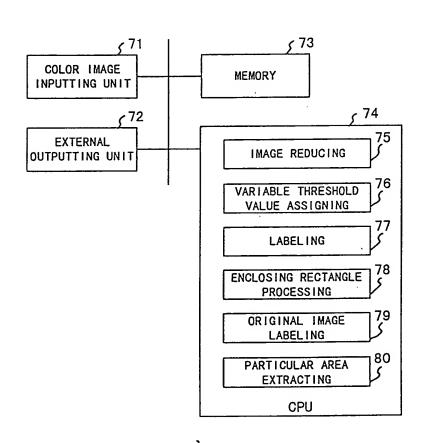


FIG. 9

APPARATUS INVENTORS:

Yutaka KATSUYAMA

SERIAL NO.: DOCKET NO.:

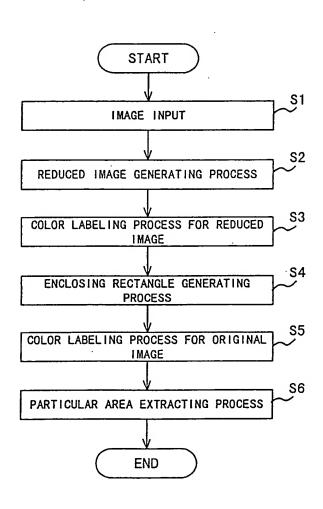


FIG. 10

APPARATUS INVENTORS:

Yutaka KATSUYAMA

SERIAL NO.: DOCKET NO.:

REDUCTION RATIO 1/3

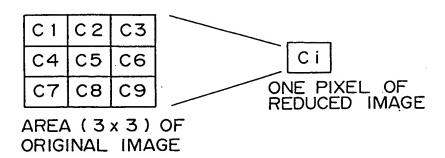


FIG. 11A

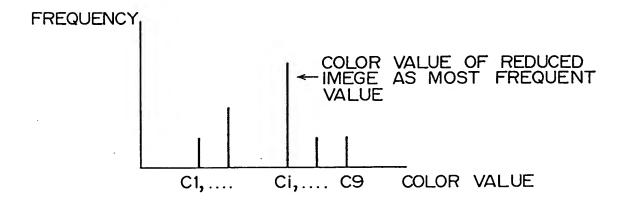


FIG. 11B

APPARATUS INVENTORS:

Yutaka KATSUYAMA

SERIAL NO.: DOCKET NO.: Unassigned 826.1526D

1	2	3
8	C	4
7	6	5

C: CONSIDERED PIXEL. COLOR VALUE (Rc, Gc, Bc)

1~8: EIGHT PIXELS ADJACENT TO CONSIDERED PIXEL

COLOR VALUE (Ri, Gi, Bi) $i = 1 \sim 8$

FIG. 12A

do i = O if IRc-Ril Rth and
IGc-Gil Gth and
IBc-Bil Bth

LARGE VALUE SUGH AS
1000: OTHERWISE
(ANY VALUE LARGER THAN

FIG. 12B

THRESHOLD VALUE th)

TITLE: COLOR IMAGE PROCESSING
APPARATUS AND PATTERN EXTRACTING
APPARATUS
INVENTORS: Yutaka KATSUYAMA
SERIAL NO.: Unassigned
DOCKET NO.: 826.1526D

ENTRY	THRESHOLD VALUE				
(R1, G1, B1)	(Rth1, Gth1, Bth1)				
(R2, G2, B2)	(Rth2, Gth2, Bth2)				
•	•				
•	•				
(Ri, Gi, Bi)	(Rthi, Gthi, Bthi)				
• •	•				
·	•				
(RN, GN, BN)	(RthN, GthN, BthN)				

FIG. 13A

ENTRY	THRESHOLD VALUE	R
R1 ~ R4	Rt1	
R5 ~ R8	Rt2	
•		
•	•	
•	•	
RN−3 ~ RN	RtM	

G

ENTRY	THRESHOLD VALUE					
G1 ~ G4	Gt1					
RG ∼ G8	Gt2					
	•					
•	•					
<u> </u>						
GN−3 ~ GN	GtM					

ENTRY	THRESHOLD VALUE	В
B1 ∼ B4	Bt1	
B5 ~ B8	Bt2	
•		
•	•	
•	•	
BN-3 ∼ BN	BtM	

FIG. 13B

TITLE: COLOR IMAGE PROCESSING
APPARATUS AND PATTERN EXTRACTING
APPARATUS
INVENTORS: Yutaka KATSUYAMA
SERIAL NO.: Unassigned
DOCKET NO.: 826.1526D

R'

G'

B'

ENTRY	THRESHOLD VALUE
R1 ~ R4	Rt1
R5 ~ R8	Rt2
.	•
•	. • .
•	•
RN−3 ~ RN	RtM

ENTRY	THRESHOLD VALUE				
G1 ~ G4	Gt1				
RG ∼ G8	Gt2				
•	•				
•	•				
•	•				
GN−3 ~ GN	GtM				

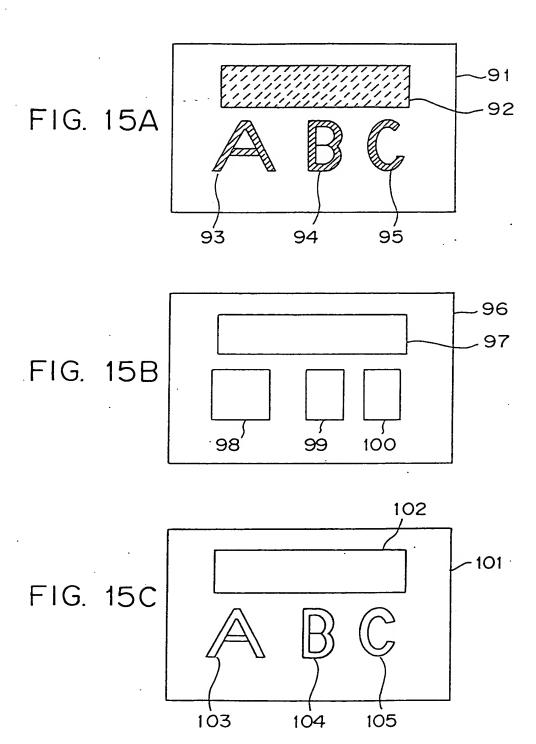
ENTRY	THRESHOLD VALUE
B1 ∼ B4	Bt1
B5 ∼ B8	Bt2
•	•
•	• !
•	
BN−3 ~ BN	BtM

F.IG. 14

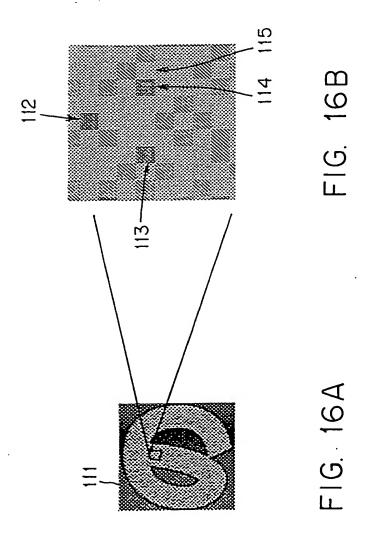
INVENTORS: SERIAL NO.:

Yutaka KATSUYAMA

DOCKET NO .:



TITLE: COLOR IMAGE PROCESSING
APPARATUS AND PATTERN EXTRACTING
APPARATUS
INVENTORS: Yutaka KATSUYAMA
SERIAL NO.: Unassigned
DOCKET NO.: 826.1526D



Yutaka KATSUYAMA Unassigned 826.1526D

INVENTORS: SERIAL NO.: DOCKET NO.:

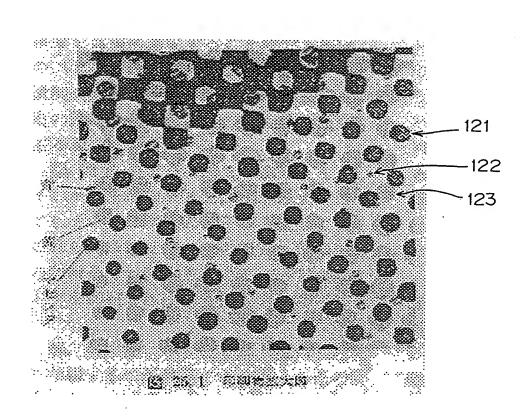


FIG. 17

APPARATUS

INVENTORS: SERIAL NO.: Yutaka KATSUYAMA

SERIAL NO.: Unassigned DOCKET NO.: 826.1526D

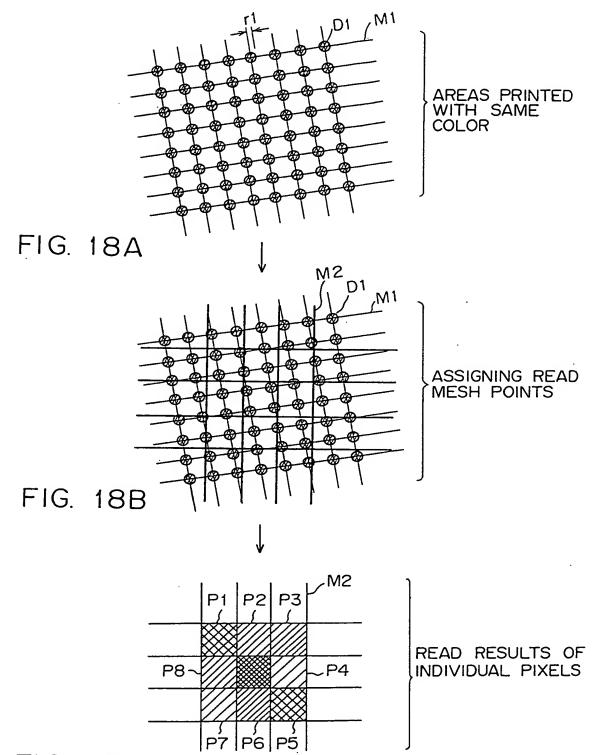
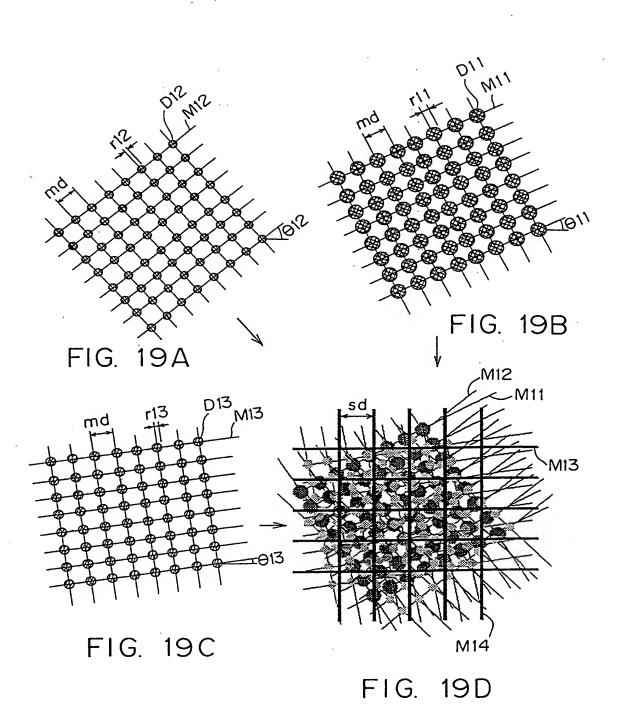


FIG. 18C

APPARATUS INVENTORS: SERIAL NO.: DOCKET NO.:

Yutaka KATSUYAMA Unassigned 826.1526D



INVENTORS: SERIAL NO.:

Yutaka KATSUYAMA Unassigned 826.1526D

DOCKET NO .:

EXAMPLE OF TABLE FOR R (THIS TABLE APPLIES TO TABLES FOR G AND B)

R	MAXIMUM VALUE OF	
	LUMINANCE DIFFERENCE WITH	RESOLUTION
VALUE	ADJACENT PIXELS	
0	2	14
0	2	15
0	1	16
:	:	:
0	1	35
3	10	14
3	8	15
3	7	16
:	:	:
3	2	35
:	:	:
:	:	
255	0	14
255	0	15
:	:	
255	0	35

FIG. 20

APPARATUS INVENTORS:

Yutaka KATSUYAMA

SERIAL NO.: Unassigned B26.1526D

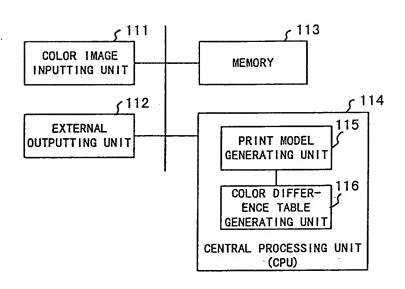


FIG. 21

APPARATUS INVENTORS:

Yutaka KATSUYAMA

SERIAL NO.: DOCKET NO.:

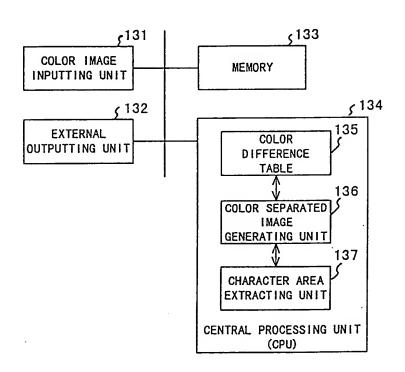


FIG. 22

APPARATUS INVENTORS:

Yutaka KATSUYAMA

SERIAL NO.: DOCKET NO.:

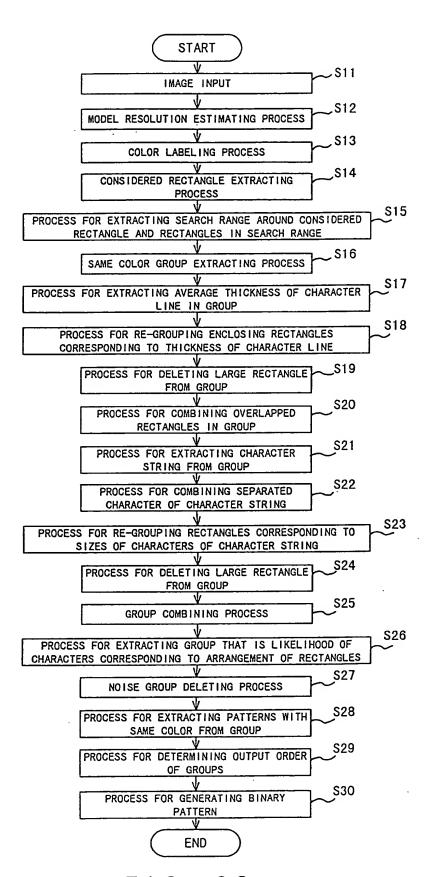


FIG. 23

APPARATUS

INVENTORS: SERIAL NO.:

Yutaka KATSUYAMA

Unassigned 826.1526D DOCKET NO .:

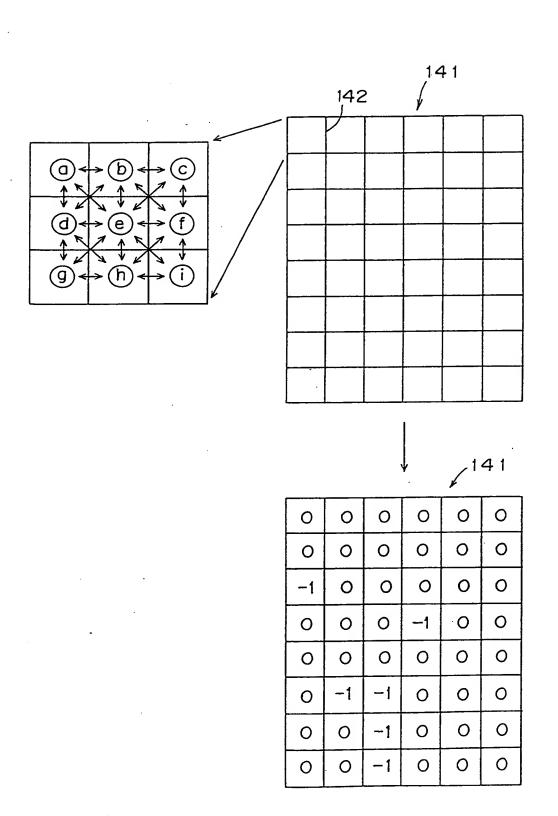
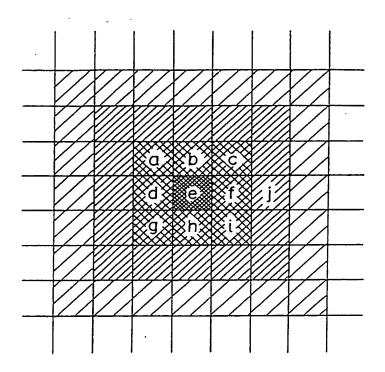


FIG. 24

Yutaka KATSUYAMA

INVENTORS: SERIAL NO.: DOCKET NO.: Unassigned 826.1526D



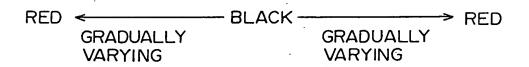


FIG. 25

APPARATUS INVENTORS:

Yutaka KATSUYAMA

SERIAL NO.: Unassigned DOCKET NO.: 826.1526D

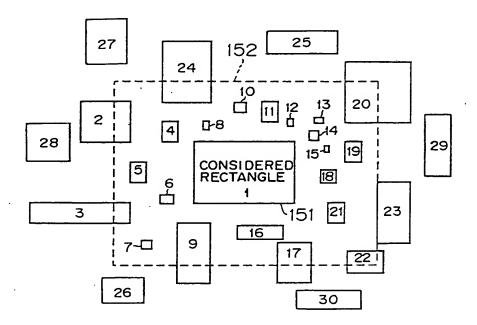
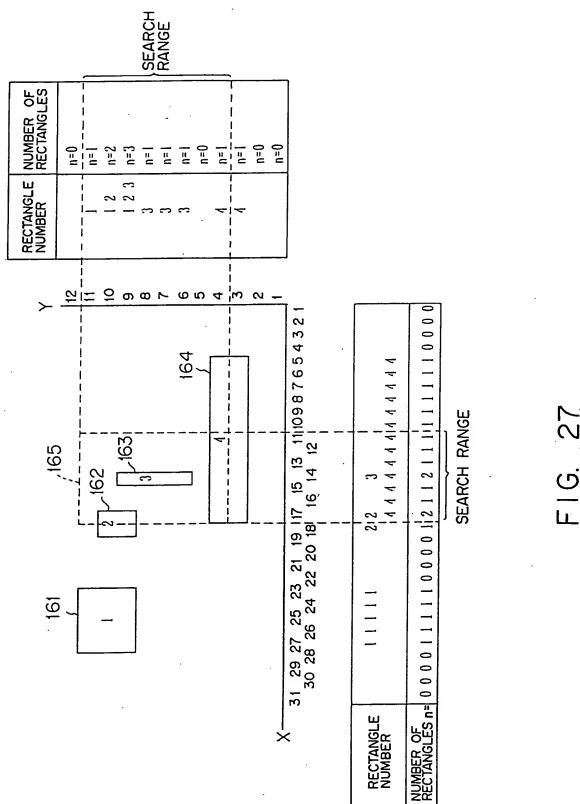


FIG. 26

APPARATUS

Yutaka KATSUYAMA

INVENTORS: SERIAL NO.: DOCKET NO.:



Yutaka KATSUYAMA

INVENTORS: SERIAL NO.: DOCKET NO.:

٠											.			,
RECTANGLE	-	1		1	-	2	1	2	1	2	-	2	-	-
X COORDINATE VALUE	155	156	•••	159	160	160	1 9 1	161	162	162	163	163	164	165
									•					
RECTANGLE NUMBER	1	1		1	1		RECTANGLE		7.	Ν σ	7 0	7		F1G. 28B
X COORDINATE VALUE	155	156		164	165		COORDINATE	VALUE	- 1	i i	701			FIG.
×														
							172 - 2		155 181 183 185		FIG 28A			

Yutaka KATSUYAMA Unassigned 826.1526D

INVENTORS: SERIAL NO.: DOCKET NO.:

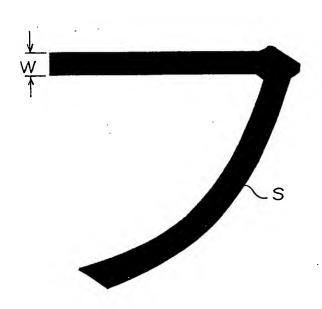


FIG. 29A

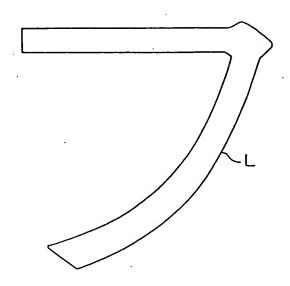


FIG. 29B

APPARATUS

INVENTORS: SERIAL NO.: DOCKET NO.:

Yutaka KATSUYAMA

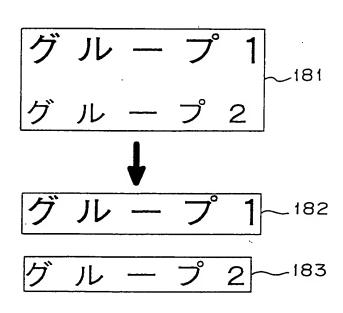
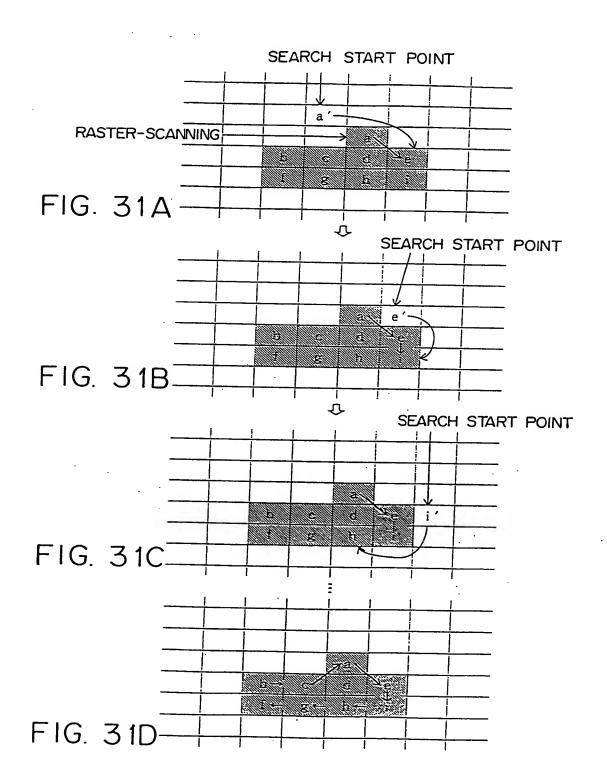


FIG. 30

APPARATUS INVENTORS:

Yutaka KATSUYAMA

SERIAL NO.: DOCKET NO.:



APPARATUS INVENTORS: Yutaka KATSUYAMA

SERIAL NO.: DOCKET NO.: Unassigned 826.1526D

5	6	7
4	С	0
.3	2	1

C : CURRENT PIXEL

O~7: PIXELS ADJACENT TO CURRENT PIXEL, DIRECTION CODE VIEWED FROM PIXEL C IS DC, PIXELS ARE SEARCHED IN DIRECTION OF DC

APPARATUS

INVENTORS: SERIAL NO.:

Yutaka KATSUYAMA

DOCKET NO.:

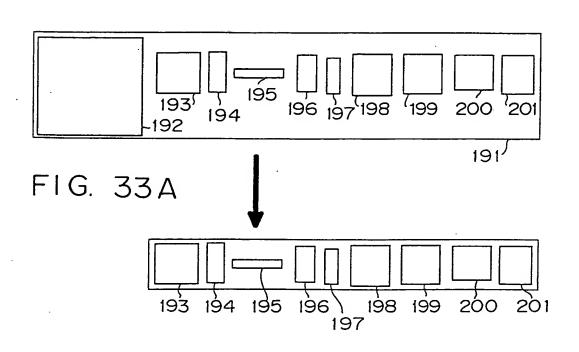


FIG. 33B

INVENTORS:

Yutaka KATSUYAMA

SERIAL NO.: DOCKET NO .:

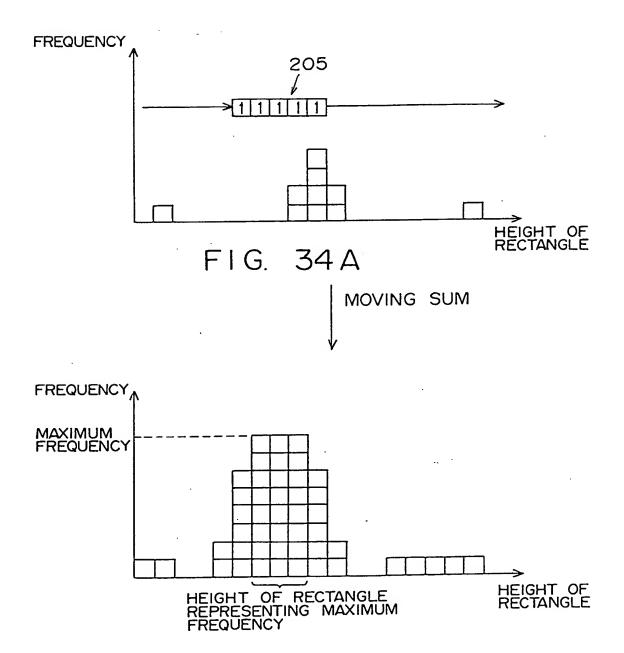


FIG. 34B

TITLE: COLOR IMAGE PROCESSING
APPARATUS AND PATTERN EXTRACTING
APPARATUS
INVENTORS: Yutaka KATSUYAMA
SERIAL NO.: Unassigned
DOCKET NO.: 826.1526D

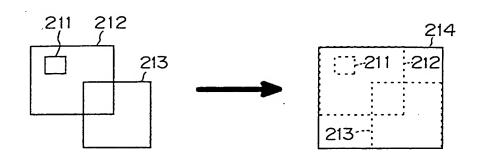


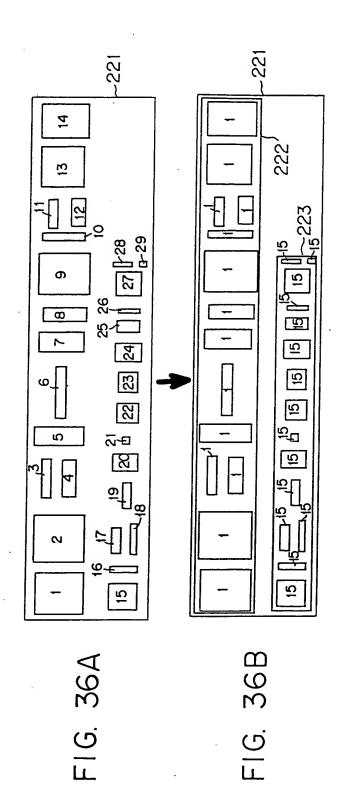
FIG. 35A

FIG. 35B

APPARATUS INVENTORS: SERIAL NO.: DOCKET NO.:

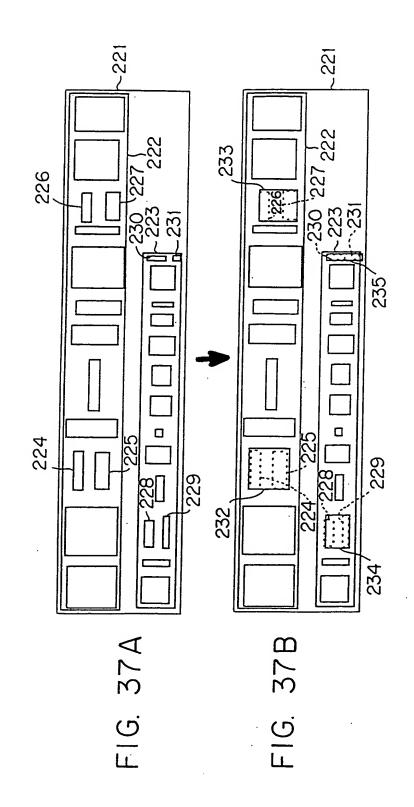
Yutaka KATSUYAMA

L NO.: Unassigned ET NO.: 826.1526D



TITLE: COLOR IMAGE PROCESSING
APPARATUS AND PATTERN EXTRACTING
APPARATUS
INVENTORS: Yutaka KATSUYAMA
SERIAL NO.: Unassigned
DOCKET NO.: 826.1526D

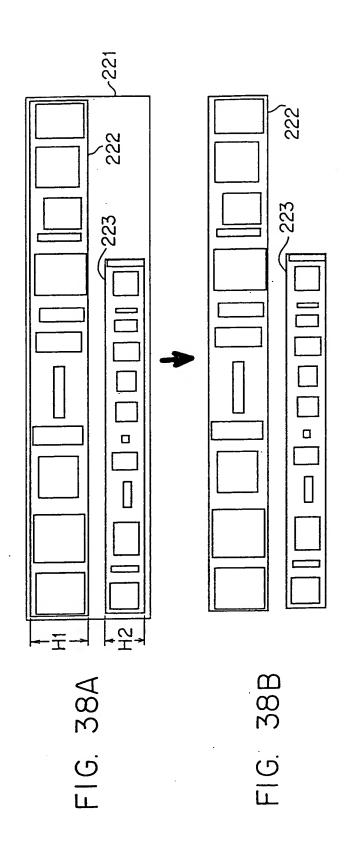
Yutaka KATSUYAMA Unassigned 826.1526D



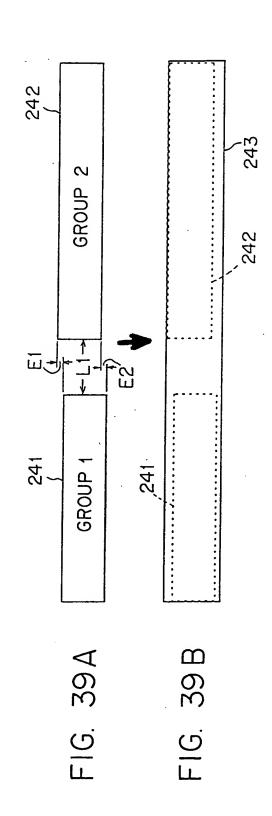
INVENTORS:

Yutaka KATSUYAMA

SERIAL NO.: DOCKET NO.:

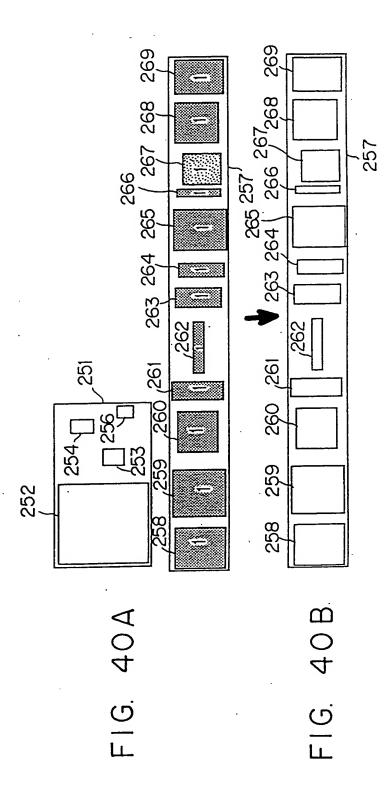


TITLE: COLOR IMAGE PROCESSING
APPARATUS AND PATTERN EXTRACTING
APPARATUS
INVENTORS: Yutaka KATSUYAMA
SERIAL NO.: Unassigned
DOCKET NO.: 826.1526D



Yutaka KATSUYAMA

INVENTÓRS: SERIAL NO.: DOCKET NO.: Unassigned 826.1526D



1 : HORIZONTAL ARRANGEMENT FLAG

2: VERTICAL ARRANGEMENT FLAG

TITLE: COLOR IMAGE PROCESSING
APPARATUS AND PATTERN EXTRACTING
APPARATUS
INVENTORS: Yutaka KATSUYAMA
SERIAL NO.: Unassigned
DOCKET NO.: 826.1526D

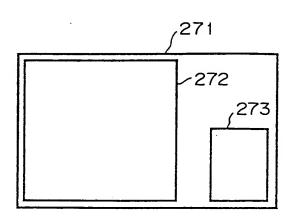
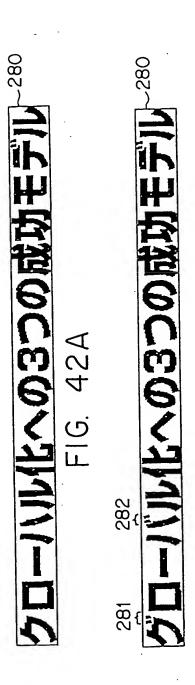


FIG. 41

APPARATUS

Yutaka KATSUYAMA

INVENTORS: SERIAL NO.: DOCKET NO.:



F1G. 42B

APPARATUS

Yutaka KATSUYAMA Unassigned 826.1526D

INVENTORS: SERIAL NO.: DOCKET NO.:

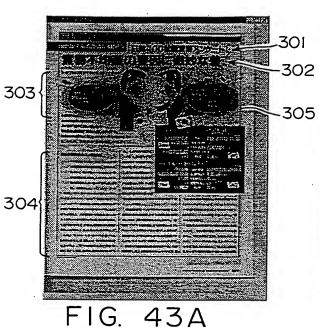
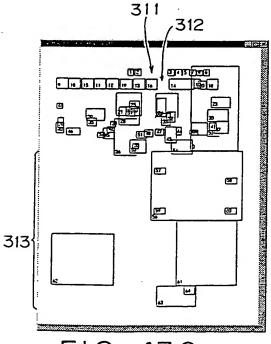
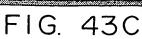


FIG. 43B





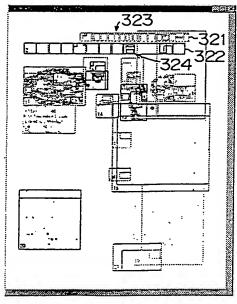


FIG. 43D

APPARATUS INVENTORS: Yutaka KATSUYAMA

SERIAL NO.: DOCKET NO.: Unassigned 826.1526D

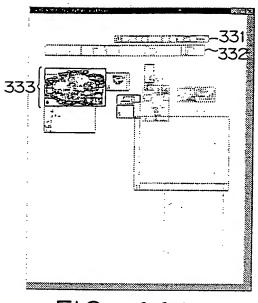


FIG. 44A

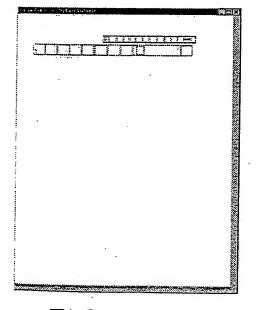


FIG. 44C

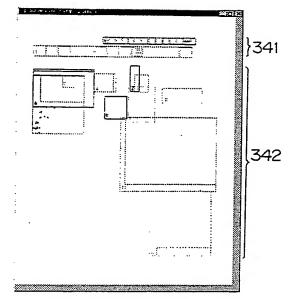


FIG. 44.B

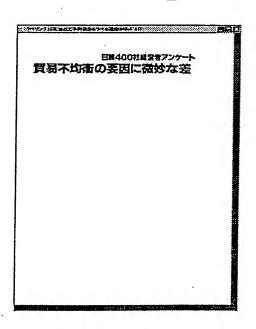


FIG. 44D

TITLE: COLOR IMAGE PROCESSING
APPARATUS AND PATTERN EXTRACTING
APPARATUS
INVENTORS: Yutaka KATSUYAMA
SERIAL NO.: Unassigned
DOCKET NO.: 826.1526D

45B